

Remarks:

Applicants have read and considered the Office Action dated October 29, 2009 and the references cited therein. Claims 1-19 have been amended. Moreover, the Abstract and Specification have been amended. Claims 1-19 are currently pending. Reconsideration is hereby requested.

In the Action, the drawings were objected to as including reference numeral 33, which was not mentioned in the specification. The specification has been amended to correct a typographical error. Applicants assert that element 33 is mentioned in the description. Applicants request that the objection to the drawings be withdrawn.

The disclosure was objected to for a number of informalities. The specification has been amended so that reference number 22 is always used with the aerosol passage. Applicant asserts that the language is consistent and requests that the objection to the specification be withdrawn.

Claims 1-19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Office Action indicated that claims 1 and 6 lacked antecedent basis for some limitations. Claims 1 and 6 have been amended to correct the antecedent basis issues. Applicants requests that the rejection under 35 U.S.C. § 112 be withdrawn.

Claims 1-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Patel et al. in view of Denyer et al. Applicants respectfully traverse the rejection. The Office Action acknowledges that Patel does not teach or suggest an aerosol passage which extends in an opening manner into a mixing chamber, as recited on claim 1. This feature is clearly shown in Figures 7-11 with the membrane forming an even flat surface with assembly 80 facing mouthpiece 63. The aerosol passage extending into the mixing chamber substantially assists in

avoiding contamination of the aerosol membrane during use as contaminants exhaled by the patient are blocked from reaching the membrane. Applicant asserts that Patel neither teaches nor suggests all of the elements as recited in claim 1. Moreover, Denyer fails to overcome the deficiencies of Patel. The nebulizer of Denyer is a completely different type of nebulizer than that shown in the present application. Denyer teaches a nozzle type nebulizer rather than a membrane type nebulizer. Such a nebulizer has a fundamentally different routing of air flow within the nebulizer as the supplier is divided such that one part is guided to the nozzle and the remainder is directly routed to the exit of the mouthpiece opening toward the patient. Denyer achieves mixing an aerosol with the inner air and a deviation of the aerosol flow along nebulizer parts. Denyer consequently provokes partial precipitation of the aerosol to filter out aerosol particles of the specific size. This is critical for Denyer as the particle distribution of the aerosol is much more spread out in nozzle or jet type nebulizers.

Conversely, a membrane nebulizer, as recited in the present claims, generates an air particle spectrum, for which precipitation in the aerosol is undesirable. The exhalation valve and inhalation valve are separated from each other different distances from the membrane nebulizer. This concentrates the aerosol, which is neither considered nor desired by Denyer. Denyer only relates to aerosol loss and uses a pressure sensor 9 to determine inhalation phases subsequently the aerosol is generated. Therefore, Denyer relates to fundamentally different type of art and there is no motivation to combine the nozzle type nebulizer of Denyer with the membrane device of Patel.

Even if the cited references are combined, the present invention has a common airtight assembly that forms the valve, valve seats and nebulizer membranes. Such a configuration locates the valve in the immediate vicinity of the inner aerosol generation so that air passing can drag the aerosol toward the exit opening in a well defined manner. Such a structure and advantages are neither shown nor suggested by the prior art. Moreover, there is no motivation in the prior art to combine the references to arrive at such a configuration.

Finally, the valve and aerosol passage are a single part that simplifies manufacture and provides a much improved product that is easier to clean for patients. Such a construction also provides superior durability and reliability as there are no parts to disconnect. Applicants assert that the inhalation therapy device as recited in the claims is neither shown nor suggested by Patel, Denyer, or any other prior art or combination thereof. Moreover, Applicants assert that there is no motivation in the prior art to combine the references. Applicants therefore request that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Patel et al. in view of Denyer et al. and Voges. As discussed above, claim 1 patentably distinguishes over the combination of Patel et al. and Denyer et al. Voges fails to remedy the shortcomings of Patel and Denyer. Therefore, claim 1 patentably distinguishes over the combination of Patel et al., Denyer et al. and Voges. Therefore, claim 15 is also believed to be allowable for at least the same reasons. Applicants therefore request that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Finally, claims 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Patel, Denyer and Abair et al. As discussed above, claim 1 patentably distinguishes over the combination of Patel and Denyer. Abair et al. fails to remedy the shortcomings of the combination. Therefore, claim 1 is believed to patentably distinguish over the combination of Patel, Denyer and Abair. As claim 1 distinguishes over the combination, Applicants assert that claims 18 and 19 also patentably distinguish over the combination. Applicants therefore request that the rejection be withdrawn.

A speedy and favorable action in the form of a Notice of Allowance is hereby solicited. If the Examiner feels that a telephone interview may be helpful in this matter, please contact Applicant's representative at (612) 336-4728.

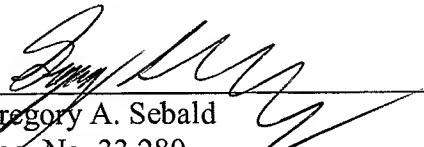
U.S. Patent Application Serial No. 10/538,515
Reply to Office Action dated October 29, 2009

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.



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Respectfully submitted,
MERCHANT & GOULD P.C.

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